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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/790,396	03/01/2004	Shumin Yang	IM-1-C1-PUS-1	3337	
26949 7	590 06/18/2004		EXAMINER		
HESKA CORPORATION			OUSPENSKI, ILIA I		
INTELLECTUAL PROPERTY DEPT. 1613 PROSPECT PARKWAY			ART UNIT	PAPER NUMBER	
	FORT COLLINS, CO 80525			1644	
			DATE MAILED: 06/18/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/790,396	YANG ET AL.			
Office Action Summary	Examiner	Art Unit			
	ILIA OUSPENSKI	1644			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1)⊠ Responsive to communication(s) filed on 01 M	arch 2004.				
	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 40 - 59 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 40 - 59 are subject to restriction and/ Application Papers 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) according a content of the file of the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request that any objection to the specificant may not request the specificant may not request the specificant may not request the specificant may not re	wn from consideration. or election requirement. r. epted or b) objected to by the Edrawing(s) be held in abeyance.	e 37 CFR 1.85(a).			
11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)	∞ □	(DTO 440)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

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DETAILED ACTION

1. Applicant's Preliminary Amendment, filed 03/01/2004, is acknowledged and has been entered.

Claims 1 – 39 have been cancelled.

Claims 40 – 59 have been added.

Claims 40 - 59 are pending and being acted upon presently

Sequence Compliance

2. The instant application appears to be in sequence compliance for patent applications containing nucleotide sequence and/or amino acid sequence disclosures.

Restriction Requirement

3. The following is noted: Claim 53, and dependent claims thereof, include a recitation of "method to regulate an immune response". Specification discloses use of B7 proteins to "upregulate or downregulate" an immune response (e.g. page 46 first paragraph). These methods are mutually exclusive in that they reach opposing endpoints, and in that they employ structurally distinct forms of B7-2 protein to accomplish these mutually exclusive endpoints.

Consequently, the claims have been limited to <u>either</u> a method relating to downregulation, <u>or</u> a method relating to upregulation, irrespective of the format of the claims.

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4. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

Group I. Claims 40 - 52, drawn to <u>canine</u> B7-2 proteins and compositions thereof, classified in class 530, subclass 350, and class 514, subclass 8.

Group II. Claims 40 – 52, drawn to <u>feline</u> B7-2 proteins and compositions thereof, classified in class 530, subclass 350, and class 514, subclass 8.

Group III. Claims 53 – 59, drawn to methods of <u>upregulating</u> an immune response comprising administering <u>canine</u> B7-2 protein, classified in class 514, subclass 8.

Group IV. Claims 53 – 59, drawn to methods of <u>downregulating</u> an immune response comprising administering <u>canine</u> B7-2 protein, classified in class 514, subclass 8.

Group V. Claims 53 – 59, drawn to methods of <u>upregulating</u> an immune response comprising administering <u>feline</u> B7-2 protein, classified in class 514, subclass 8.

Group VI. Claims 53 – 59, drawn to methods of <u>downregulating</u> an immune response comprising administering <u>feline</u> B7-2 protein, classified in class 514, subclass 8.

5. The inventions are distinct, each from the other because of the following reasons:

Inventions in Groups I and II are different products, which differ with respect to their physicochemical properties and are therefore patentably distinct.

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Inventions in Groups I – II and groups VI-VIII are related as product and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)).

In the instant case, the product as claimed, namely the B7-2 protein, can be used in a materially different process of using that product, such as the process of using the polypeptide as an immunogen to produce a reagent antibody that binds specifically to the polypeptide.

Inventions III, IV, V, and VI are disclosed as materially different methods that differ at least in objectives, method steps, reagents and/or doses and/or schedules used, response variables, assays for end products and/or results, and criteria for success and therefore, the claimed methods are distinct.

- 6. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by recognized divergent subject matter. Further, even though the classification is shared, a different field of search would be required to address the inhibitory versus stimulatory readouts. Moreover, a prior art search also requires a literature search, which would not be completely coextensive. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.
- 7. It is noted that the specification discusses regulating an immune response to prevent or treat a number of diseases (page 40 paragraph 4). Thus this application contains claims directed to the following patentably distinct species of the claimed Inventions III IV: wherein the immune disorder is: autoimmune diseases, allergic reactions, infectious diseases, tumor development and graft rejection.

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Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 53 – 59 are generic.

Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

8. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

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9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

10. The examiner has required restriction between product (Groups I and II) and process claims (Groups III – VI). If applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

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In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILIA OUSPENSKI whose telephone number is 571-272-2920. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILIA OUSPENSKI
Patent Examiner
Art Unit 1644

June 15, 2004

PHILLIP GAMBEL, PH.D
PRIMARY EXAMINER
TECH CENTEN 1600